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Amino-nitrile cleavage in the electrochemical reduction of hydeazones of aromatic aldehydes

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Abstract

1. Factors which determine the possibility of amino-nitrile cleavage of hydrazones on electrochemical reduction (ECR) include the basicity of the anionic product formed in the course of the ECR and the mobility of the aldehyde hydrogen which depends on the character of the electron polarization of the hydrazone fragment and the polarity of the N-N bond. 2. The primary action in amino-nitrile cleavage under conditions of ECR is the deprotonation of the azomethine fragment in the unreduced molecule by electrochemically generated strong base (anion or dianion). © 1988 Plenum Publishing Corporation.

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